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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,194	07/28/2003	Vetrivel Ayyavu	03-0392	6124

7590 01/09/2008  
PETER SCOTT  
LSI LOGIC CORPORATION  
M/S D-106  
1551 MCCARTHY BLVD.  
MILPITAS, CA 95035

EXAMINER

PEYTON, TAMMARA R

ART UNIT	PAPER NUMBER
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2182

MAIL DATE	DELIVERY MODE
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01/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/628,194

Applicant(s)

AYYAVU ET AL.

Examiner

Tammara R. Peyton

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,6-11 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,6-11 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)):
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

The indicated allowability of claims 1, 6-11 and 22-25 is withdrawn in view of the newly discovered reference(s) to Maxtor (Serial Attached SCSI Architecture: Part 4 - the Transport Layer. October 2003 - 6 page). Rejections based on the newly cited reference(s) follow.

Regarding claim 1, the recitation "a standard advanced technology attachment queuing automation circuit," has not been **given patentable** weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-11 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maxtor ("Serial Attached SCSI Architecture: Part 4 - the Transport Layer, October 2003 - 6 page") and Nemazie (US2004/0252716).

As per claims 1 and 11, Maxtor teaches a first circuit for storing a command from a higher layer of a serial advanced technology attachment (SATA) device (SAS multiple target device, Fig. 1);

a second circuit (initiator port, Figs. 2-5) for creating a frame information structure (FIS) corresponding to the command, communicating with a transport layer of the SATA device (See definition of SAS, SSP frame structure transmission sequences, pgs. 2, 3, 5), and transmitting the frame information structure to the transport layer (pg. 2, Fig. 2) of the SATA device; and

a third circuit (target port, Figs. 2-5) for receiving a FIS from the transport layer of the SATA device, decoding the received FIS, and taking an appropriate action. (pgs. 2-5)

Maxtor teaches using a SAS device and a plurality of SAS transport layer processing elements each communicatively coupled to a SAS application layer processing element via initiator ports wherein each SAS transport layer processing element is adapted to exchange frame information structure information received from the SAS application layer processing element with one or more of the other SAS devices (page 2 paragraph 2 - figure 2)

As per claims 6-11 and 22-25 Maxtor does not teach a command completion queue. However, Nemazie teaches a command completion (FIFO) queue [0133,0147] that receives commands and wherein the command completion queue is implemented in software or hardware. (Fig. 8a-9) [0016, 0026, 0097-0100, 0134-0155, 0191]

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of both the Maxtor and Nemazie references into a single embodiment because both systems teach an overview of the Serial Attached SCSI Architecture and furthermore Nemazie completion queue would properly handle the requests and frame transmissions of the application/transport layer of Maxtor.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (571) 272-4157. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a

Art Unit: 2182

general nature of relating to the status of this application should be directed to the  
Group receptionist whose telephone number is (571) 272-2100.

**TAMMARA PEYTON  
PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Tammara Peyton', with a stylized, flowing script.

Tammara Peyton

January 6, 2008